

## REMARKS

After entry of the present amendment, claims 1 through 36 will be pending in the application. Claims 1, 2, 4, and 19 have been amended without introduction of a new matter. All limitations introduced into the amended claims are supported by the specification paragraphs [0192] and Figures 8-29 and paragraph [0266] and Figures 30-44 as filed by the Applicant.

### *Specification*

The disclosure stands objected due to certain informalities. Applicant has inserted new paragraph [00001] between the title of the invention and **BACKGROUND OF THE INVENTION** to properly claim foreign priority and deleted paragraph [00325] to render the Examiner's objection moot.

### *Claim Objections*

Claim 10 stands objected by the Examiner. The Applicant amended claim 10 to render the Examiner's objection moot.

### *Claim Rejections – 35 U.S.C. §102*

Claims 1 through 13, 15 through 31 and 33 through 36 stand rejected under 35 U.S.C. §102 (e) as being anticipated by the United States Patent No. 6,842,638 to Suri et al. (the *Suri reference*). The *Suri reference* teaches a vascular segmentation method that contains a vascular tracking method. Unlike teachings of the *Suri reference* the Applicant's inventive concept teaches a vascular tracking method using local vascular segmentation. The Applicant's inventive concept presents unique medical image processing apparatus for generating a medical image by using three-dimensional volume data representing a portion in a living body, which includes a volume data obtaining unit for obtaining predetermined three-dimensional volume data including

a tubular tissue; a region specifying unit for specifying a region including a position on the tubular tissue in the three-dimensional volume data *as the specifying unit specifies a planar region which orthogonally intersects with the longitudinal direction of the tubular tissue*, an extraction unit for extracting information on the tubular tissue in each of the specified regions, and a center specifying unit of the extraction unit for specifying a center position of a cross section of the tubular tissue in each of the plurality of regions specified by said region specifying unit.

Alluding to the above, the *Suri reference* fails to teach or suggest any of the aforementioned limitations of the amended claim 1. The *Suri reference* as illustrated under numeral 370 in Figure 15, the edge volume is divided into two dimensional edge volume slices, as set forth in col. 15 line 42, and later edge volume slices are provided to “vessel center tagger 400 as shown in Figure 15, which relates with a center specifying unit. In the *Suri reference*, the phrase “divided into two dimensional edge volume slices” is clearly reads that the slices are parallel but are not orthogonal with vessel center line. Therefore, as amended, claim 1 clearly defines over the *Suri references*. Claim 19 was also amended by the Applicant in a similar fashion.

### ***Claim Rejections – 35 U.S.C. §103***

Claims 14 and 32 stand rejected under 35 U.S.C. §103 (a) as being unpatentable over the *Suri reference* and the United States Patent No. 5,891,030 to Johnson et al. (the *Johnson reference*). Claims 14 and 32 depend upon independent claims 1 and 19, respectively, wherein the inventive subject matter set forth in said claims 1 and 19 is believed by the Applicant to be

novel over the *Situ reference*. The Applicant respectfully asks the Examiner for reconsideration of Claim Rejections under 35 U.S.C. §103 of claims 14 and 32.

For the reasons set forth above, the Applicant respectfully submits that claims 1 through 36 are in condition for allowance, which allowance is respectfully solicited.

The Commissioner is authorized to charge our Deposit in the amount of \$1,050.00 as required for the filing of this Amendment. Also, if there are any additional fees due, the Commissioner is authorized to charge our Deposit Account for those additional fees or credit the account for any overpayments regarding this Amendment.

Respectfully Submitted,

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